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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/154,966	09/17/1998	CHRISTOPHER HAYWOOD		7857

23363 7590 09/27/2002

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT PAPER NUMBER

2665

DATE MAILED: 09/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/154,966

Applicant(s)

HAYWOOD ET AL.

Examiner

Steven HD Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 9-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 9-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This action is in response to the pre-amendment filed on 7/17/02. Claims 4-8 have been canceled and claims 1-3 and 9-13 are pending in the application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Haddock (USP 6023471). 2/2/08

Haddock discloses a switch backplane comprising a plurality of switching controllers (Fig 1b, Ref 105-N) and plurality of packet buses, (Fig 1B, the links between REF 105 and 100), each of packet buses having a root interfacing with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers wherein a plurality of

switch controllers propagate packet data in parallel from the roots with which the switch controllers interface with leaves (Ref 105s are connected with the links, See Fig 1B).

4. Claims 1-2 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Perlman (USP 6442170). 8/1/00

Regarding claim 1, Perlman discloses (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a switch backplane (Fig 2) comprising a plurality of switching controllers (Fig 2, Ref 204) and plurality of packet buses, (Fig 2, segments), each of packet buses having a root interfacing with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers wherein a plurality of switch controllers propagate packet data in parallel from the roots with which the switch controllers interface with leaves (See Fig 2 wherein the ref 204s have a root interfaces for transmitting a packet on the packet buses to the leaves interfaces in parallel).

Regarding claim 2, Perlman discloses (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a claim line interfacing with a plurality of switch controllers and associated packet bus, wherein a switch controller transmits a claim signal on claim line upon identifying a packet propagated on the packet bus for capturing (See Abstract and Fig 9, the receiving port which detects a packet on the bus and asserts a signal line to notifying the other ports, claims the data packet).

Regarding claim 12, Perlman (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a switch backplane (Fig 2) comprising a plurality of switching controllers (Fig 2, Ref 204) and plurality of packet buses, (Fig 2, segments), each of packet buses having a root interfacing with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers wherein a plurality of switch controllers propagate packet data in parallel from the

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roots with which the switch controllers interface with leaves (See Fig 2 wherein the ref 204s have a root interfaces for transmitting a packet on the packet buses to the leaves interfaces in parallel); each receive interface has a address filtering mechanism for recognizing the destination address of packet and transmitting a claim signal to the other receive interface and capturing the data packet and claim signal (col. 25, lines 30 to col. 28, lines 26 and abstract).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 3 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (USP 6442170) in view of Shimizu (USP 4866702).

Regarding claim 3, Perlman discloses (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a method of generating a congestion signal if the receiving buffer can not receiving any more packets (col. 3, lines 1-9). However, Shimizu discloses (Fig 1-22 and col. 1, lines 25 to col. 13, lines 22) a stall line having a root interface with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers and switch controller transmits a stall signal from the leaf to root upon identifying a congestion condition on packet bus (See Abstract and Fig 2, Ref 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a congestion buses as disclosed by Shimizu into Perlman. The

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motivation would have been to prevent data loss and improve the throughput of network. Even without Shimizu's teaching, one of ordinary skill in the art would have been recognized a step of generating a congestion signal for transmitting via a bus into Perlman because it is well known and expected in the art.

Regarding claim 13, Perlman discloses (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a switch backplane (Fig 2) comprising a plurality of switching controllers (Fig 2, Ref 204) and plurality of packet buses, (Fig 2, segments), each of packet buses having a root interfacing with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers wherein a plurality of switch controllers propagate packet data in parallel from the roots with which the switch controllers interface with leaves (See Fig 2 wherein the ref 204s have a root interfaces for transmitting a packet on the packet buses to the leaves interfaces in parallel). Perlman discloses a method of generating a congestion signal if the receiving buffer can not receiving any more packets (col. 3, lines 1-9). However, in the same field of endeavor, Shimizu discloses (Fig 1-22 and col. 1, lines 25 to col. 13, lines 22) a stall line having a root interface with a different one of the switch controller and a plurality of leaves interfacing with a plurality of the switch controllers and switch controller transmits a stall signal from the leaf to root upon identifying a congestion condition on packet bus (See Abstract and Fig 2, Ref 5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a congestion buses as disclosed by Shimizu into Perlman. The motivation would have been to prevent data loss and improve the throughput of network. Even without Shimizu's teaching, one of ordinary skill in the art would have been recognized a step of

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generating a congestion signal for transmitting via a bus into Perlman because it is well know and expected in the art.

7. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perlman (USP 6442170) in view of Scoot (USP 5953340) and Shimizu (USP 4866702)

Regarding claims 9-10, Perlman discloses (Fig 1-20 and col. 2, lines 15 to col. 40, lines 14) a claim line (See abstract for exchanging the claimed signal with other switches) and does not fully disclose a protocol domain for converting protocol. In the same field of endeavor, Scott discloses a switch controller having a protocol domain interface for converting protocol for transmitting/receiving the data packet on the parallel packet buses (col. 7, lines 64 to col. 8, lines 42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a protocol domain as disclosed Scott into Perlman. The motivation would have been to interface the different networks. Even without Scott's teaching, one of ordinary skill in the art would have been recognized a step of applying a protocol domain into Perlman because it is well know and expected in the art.

Regarding claim 11, claim 11 is similar to claim 3. Therefore, claim 11 is rejected same rationale as claim 3.

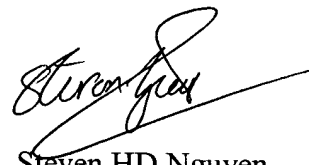
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (703) 308-8848. The examiner can normally be reached on 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy D Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

A handwritten signature in black ink, appearing to read "Steven HD Nguyen", with a long horizontal flourish extending to the right.

Steven HD Nguyen
Primary Examiner
Art Unit 2665
September 24, 2002